ENVIRONMENTAL PUBLIC HEALTH ACT (CHAPTER 95, SECTIONS 94 AND 113)

ENVIRONMENTAL PUBLIC HEALTH (SWIMMING POOLS) REGULATIONS

ARRANGEMENT OF REGULATIONS

Regulation

- 1. Citation
- 2. Definitions
- 3. Application for licence
- 4. Water supplied to pool
- 5. Injured person not to use pool
- 6. Display of notices
- 7. Water in pool to be disinfected
- 8. Conditions before pool is used
- 9. Testing kit
- 10. Algicidal agent
- 11. Director-General's approval required to use chemicals
- 12. Responsibilities of licensees
- 13. Tests
- 14. Tests for chemical and bacteriological quality
- 15. Closure of pool and access thereto
- 16. Penalty

The Schedule

[1st August 1992]

Citation

1. These Regulations may be cited as the Environmental Public Health (Swimming Pools) Regulations.

Definitions

- **2.** In these Regulations, unless the context otherwise requires
 - "chlorine residual" means a concentration of residual chlorine in the uncombined state, that is to say, in the form of hypochlorous acid or hypochlorite ion or both;

"licence" means a licence referred to in section 63 of the Act;

[S 563/2010 wef 01/12/2010]

"licensee" means the holder of a valid licence;

[S 563/2010 wef 01/12/2010]

"pH" means the common logarithm of the reciprocal of the hydrogen ion concentration;

"pool" means a swimming pool as defined in section 2 of the Act.

Application for licence

3.—(1) Every application for a licence shall be made to the Director-General in such form as the Director-General may determine.

[S 563/2010 wef 01/12/2010]

(2) The fee for a licence shall be \$200 per annum.

[S 563/2010 wef 01/12/2010]
[S 795/2014 wef 01/01/2015]

Water supplied to pool

- **4.** A licensee shall ensure that
 - (a) the source of water supply to a pool is approved by the Director-General; and

[S 563/2010 wef 01/12/2010]

(b) there is no direct connection between any domestic water supply system and the piping system of a pool.

Injured person not to use pool

5. No person who suffers from any cut, wound or sore shall be permitted to use a pool.

Display of notices

6. A licensee shall ensure that a sufficient number of notices directing every person to use a shower before entering the pool are displayed in conspicuous places.

Water in pool to be disinfected

7.—(1) A licensee shall ensure that the water in the pool is disinfected by calcium hypochlorite or sodium hypochlorite or any other chemicals approved by the Director-General.

[S 563/2010 wef 01/12/2010]

- (2) Where calcium hypochlorite or sodium hypochlorite is used, the licensee shall ensure that the chlorine residual in the water in the pool shall not be less than 1.0 milligram per litre and not more than 3.0 milligrams per litre and the pH value of the water shall not be less than 7.2 and not more than 7.8 maintained at the outlet.
- (3) Where other halogens or approved chemicals are used for disinfecting the water in the pool, the licensee shall ensure that the disinfectant residual and pH value of the water in the pool are maintained at a level approved by the Director-General.

[S 563/2010 wef 01/12/2010]

Conditions before pool is used

- **8.** A licensee shall ensure that no pool is used or made available for use unless
 - (a) the turbidity of the water as expressed in Nephelometric Turbidity Unit shall not exceed 5;
 - (b) the colour of the water as expressed in Hazen Unit shall not exceed 5;
 - (c) the disinfectant residual and pH value of the water are as stipulated in regulation 7(2) or (3), as the case may be; and
 - (d) the bacteriological quality of the water is as follows:
 - (i) no sample of water shall contain any Escherichia coliform organism in 100 millilitres of water;
 - (ii) not more than one out of 5 consecutive samples of water shall contain any coliform organism in 100 millilitres of water, and in any case none of the 5 consecutive samples shall contain more than 10 coliform organisms in 100 millilitres of water; and

(iii) no sample of water shall contain more than 200 bacteria per millilitre as determined by the 24-hour plate count at 37° Celsius or by the membrane filter method.

Testing kit

9. A licensee shall ensure that a testing kit for measuring the concentration of the disinfectant pH value of the water in the pool is provided and maintained in good working condition.

Algicidal agent

10. A licensee shall ensure that if copper sulphate is used as an algicidal agent for the water in the pool, the concentration of copper sulphate determined as copper shall not exceed 0.2 milligram per litre.

Director-General's approval required to use chemicals

11. No chemical, other than those specified in these Regulations, shall be used for any purpose without the prior approval of the Director-General.

[S 563/2010 wef 01/12/2010]

Responsibilities of licensees

- **12.** A licensee shall ensure that
 - (a) all equipment and related parts of the water purification system of a pool are kept in good working condition whenever the pool is available for use and for such further periods as may be necessary to maintain the water in the pool in a clear and disinfected condition:
 - (b) the circulation and purification system is operated and maintained so as to keep the water in the pool clear and clean at all time;
 - (c) the water in the pool is free of scum, debris or any floating material;
 - (d) the entire pool area is kept clean, and free of litter and vermin;

- (e) all the surfaces of the pool including the decks shall be kept free of slime, dirt and algae;
- (f) the bottom and side walls of the pool shall be kept free of cracks and other defects;
- (g) all parts of the pool, including all ancillary equipment and buildings, shall be maintained in good condition;
- (h) all shower rooms, toilets and changing rooms are well ventilated;
- (i) all toilets, urinals, showers, wash basins and other plumbing fixtures are maintained in a clean condition and in good repair;
- (*j*) diagrammatic illustrations of artificial respiration procedure are posted such that they are clearly visible from any nearby deck; and
- (k) an adequately equipped first-aid box and life buoys are installed in conspicuous places.

Tests

- 13.—(1) A licensee shall carry out tests on the pH value and the residual disinfectant concentration of the water in the pool at least once a day.
- (2) The test results shall be kept in proper records and shall be made available for inspection by the Director-General.

[S 563/2010 wef 01/12/2010]

Tests for chemical and bacteriological quality

14.—(1) A licensee shall arrange for water in the pool to be sampled and analysed by a Government laboratory or any other laboratory approved by the Director-General for chemical and bacteriological quality at least once a month or at such other intervals as may be stipulated by the Director-General, and submit the test results to the Director-General.

[S 563/2010 wef 01/12/2010]

(2) The parameters for the chemical and bacteriological quality of water shall be as set out in the Schedule.

Closure of pool and access thereto

15. Where any person has been required by the Director-General to close any pool under section 64 of the Act, the person shall ensure that all access to the pool is effectively closed up or barricaded.

[S 563/2010 wef 01/12/2010]

Penalty

16. Any person who contravenes or fails to comply with any of the provisions of these Regulations shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$2,000 and, in the case of a continuing offence, to a further fine not exceeding \$100 for every day or part thereof during which the offence continues after conviction.

THE SCHEDULE

Regulation 14(2)

CHEMICAL AND BACTERIOLOGICAL QUALITY OF POOL WATER

- (1) Turbidity (in Nephelometric Turbidity Unit).
- (2) Colour (in Hazen Unit).
- (3) pH value.
- (4) Residual chlorine (uncombined state) or residual disinfectant.
- (5) Copper.
- (6) Colony Count in agar (24 h) 37°C (per ml).
- (7) Total Coliform Count (per 100 ml).
- (8) Escherichia Coliform Count (per 100 ml).

[G. N. No. S 308/92]

LEGISLATIVE HISTORY

ENVIRONMENTAL PUBLIC HEALTH (SWIMMING POOLS) REGULATIONS (CHAPTER 95, RG 10)

This Legislative History is provided for the convenience of users of the Environmental Public Health (Swimming Pools) Regulations. It is not part of these Regulations.

1. G. N. No. S 263/1979 — Environmental Public Health (Swimming Pools) Regulations 1979

Date of commencement : 15 December 1979

2. 1990 Revised Edition — Environmental Public Health (Swimming Pools)
Regulations

Date of operation : 25 March 1992

3. G. N. No. S 308/1992 — Environmental Public Health (Swimming Pools) Regulations 1992

Date of commencement : 1 August 1992

4. 1993 Revised Edition — Environmental Public Health (Swimming Pools) Regulations

Date of operation : 1 April 1993

5. 2000 Revised Edition — Environmental Public Health (Swimming Pools)
Regulations

Date of operation : 31 January 2000

6. G. N. No. S 563/2010 — Environmental Public Health (Swimming Pools) (Amendment) Regulations 2010

Date of commencement : 1 December 2010

7. G.N. No. S 795/2014 — Environmental Public Health (Swimming Pools) (Amendment) Regulations 2014

Date of commencement : 1 January 2015